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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,709	06/08/2007	Koichi Shudo	P28752	9187
7055 7590 07/20/2011 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER RAMACHANDRAN, UMAMAHESWARI				
ART UNIT		PAPER NUMBER		
1627				
NOTIFICATION DATE		DELIVERY MODE		
07/20/2011		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

**Advisory Action  
Before the Filing of an Appeal Brief**

**Application No.**

10/598,709

**Applicant(s)**

SHUDO ET AL.

**Examiner**

UMA RAMACHANDRAN

**Art Unit**

1627

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 28 June 2011 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.  
NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.

6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 2, 7-9, 16, 18, 19.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see below.

12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_

13. ☐ Other: \_\_\_\_\_.

/SREENI PADMANABHAN/  
Supervisory Patent Examiner, Art Unit 1627

Note: Applicants' arguments regarding the 103(a) rejections have been fully considered and found not to be persuasive. The claims are still not allowable for the following reasons:

Applicants' argue that "the prior art used in the rejection does not teach or suggest either a method for promoting formation of long-term memory from short-term memory or Am80. Therefore, as will be expanded upon below, the rejection does not arrive at Applicants' recited population of a mammal in need of consolidation of short-term as long-term memory let alone any use of Am80".

In response, Teng teaches retinoid compounds that includes the species Am-80 and further teaches that the retinoids are useful in treating neurodegenerative diseases like Alzheimer's disease, Parkinson's disease etc. Applicants have claimed "promoting formation of long-term memory from short-term memory comprises therapeutic treatment of dysfunction of memory consolidation associated with a neurodegenerative disease (claim 2) and the neurodegenerative disease comprises Alzheimer's (claim 8) and the neurodegenerative disease comprises Parkinson's disease (claim 9). The limitation "formation of long-term memory from short-term memory" in claim 7 is the preamble and administration of same compound to the same set of patients, for example patients with Alzheimer's disease will have the same therapeutic effects as claimed and here promoting formation of long-term memory from short term memory.

Applicants' argue that "Teng broadly discloses many uses for retinoic acid, but does not provide guidance for arriving at Applicants' claimed subject matter. In this regard, it is noted that Teng discloses a long list of uses of retinoid-like compounds that extends almost the entire length of column 1 of Teng. Teng has a shotgun disclosure with respect to background information and Teng has the disclosure therein (relating to background information) with only mere mention of "neurodegenerative diseases such as Alzheimer's disease, Parkinson's disease and stroke".

In response to Applicants' arguments the rejection includes Goodman and Etchamendy's teachings. Goodman teaches that the late onset Alzheimer's disease is influenced by the availability in brain of retinoic acid (see abstract). It is known in the art that memory fixation disorders are main symptoms of Alzheimer's disease. Etchamendy teaches that Vitamin A and its derivatives, the retinoids have been implicated recently in the synaptic plasticity of the hippocampus and might therefore play a role in associated cognitive functions (see abstract). Goodman and Etchamendy's teachings add support to Teng's teachings that retinoids are associated with memory and cognitive functions. A person of ordinary skill in the art from the teachings of Teng, Goodman and Etchamendy would have found it obvious to try the retinoids of Teng in treating a memory related disorder such as Alzheimer's because the reference explicitly teaches the retinoids are useful in treating neurodegenerative diseases such as Alzheimer's and Parkinson's. A person of ordinary skill in the art at the time of the invention would have found it obvious to use Am-80 in promoting long term memory from short term memory as Am-80 is one of the species of the retinoids taught by Teng.

Applicants' argue that "Teng discloses beginning at column 7, line 41 (with bold emphasis added) discloses preferred substituents that would not lead to Applicants' recited Am80".

In response, it is well-established that consideration of a reference is not limited to the preferred embodiments or working examples, but extends to the entire disclosure for what it fairly teaches, when viewed in light of the admitted knowledge in the art, to person of ordinary skill in the art.

Applicants' argue that "one having ordinary skill in the art would not have combined the disclosures of these documents with Teng in view of their diverse disclosures", Etchamendy may suggest suppression of reduction of already consolidated long-term memory by retinoic acid, but does not teach or suggest any action of retinoic acid on the consolidation process of short-term to long-term memory. Goodman appears to relate to preventing or decreasing amyloid plaque formation, and does provide disclosure as relied upon in the rejection and Goodman does not teach or suggests any disclosure relating to consolidating memory let alone consolidating short-term as long-term memory.

In response, Etchamendy teaches the alleviation of a selective age-related memory deficit in mice by pharmacologically induced normalization of brain retinoid signaling and retinoids have been implicated in the synaptic plasticity of the hippocampus and the retinoids might play a role in associated cognitive functions. Etchamendy's teaching is towards age related memory deficit and cognitive deterioration. Though Etchamendy do not explicitly teach consolidation process of short-term to long-term memory a person of ordinary skill in the art at the time of the invention would have found it obvious that retinoids are involved in cognitive functions and cognition is associated with memory. Thus a person of ordinary skill in the art at the time of the invention would have found it obvious to try using retinoids including retinoids such as Am-80 from Teng's retinoid compounds in promoting long term memory from short term memory. Goodman teaches that late onset Alzheimer's disease is influenced by the availability of retinoic acid. A person of ordinary skill in the art at the time of the invention would have found it obvious to try using a retinoic acid to treat Alzheimer's disease. Alzheimer's disease is the most common cause of dementia in later life. Dementia is defined as a serious loss of cognitive ability and cognition is associated with memory. Though Goodman does not explicitly teach consolidating short-term as long-term memory the reference suggests the role of retinoic acids in Alzheimer's disease. Administration of the same retinoic acid (e.g. Am80) to the same set of patients (e.g. Alzheimer's disease) will result in the treatment of same disorders including consolidating short-term memory to long-term memory.

Applicants' argue that "The rejection appears to be arguing inherency. However, inherency cannot be present here as inherency of Applicants' recited method must be the necessary result when performing the process recited in the prior art and not merely a possible result. In contrast, the primary reference of Teng does not disclose either Applicants' recited method and/or any desirability of treating a population in need of consolidation of short-term as long-term memory, and does not teach or suggest administration of Am80".

In response, Teng teach retinoid compounds which include the species of Am80 and further teaches that retinoids are useful in treating neurodegenerative diseases including Alzheimer's and Parkinson's. It is well known in the art that Alzheimer's disease is an irreversible, progressive brain disease that slowly destroys memory and thinking skills. Goodman teaches that late onset Alzheimer's disease is influenced by the availability of retinoic acid. A person of ordinary skill in the art at the time of the invention would have found it obvious to try using a retinoic acid to treat Alzheimer's disease. Thus administration of the same retinoic acid (e.g. Am80) to the same set of patients (e.g. Alzheimer's disease) will inherently result in the treatment of same disorders including consolidating short-term memory to long-term memory in Alzheimer patients.